

DATA RECOVERY APPARATUS AND METHOD FOR DECREASING DATA RECOVERY ERROR IN A HIGH-SPEED SERIAL LINK

ABSTRACT OF THE DISCLOSURE

5 Provided are a data recovery apparatus and method for recovering
(parallel) data from serial data received via a high-speed serial link with a
reduced data recovery error rate. The data recovery apparatus includes a clock
signal generating circuit and a data recovery circuit. The clock signal generating
circuit generates at least two clock signal groups including first and second clock
10 signal groups with different phases for alternate use in the data recovery circuit.
The data recovery circuit recovers the data from the serial data by oversampling
the serial data using one of the at least two clock signal groups selected based
on the number of rising edges of sampling clock signals of the selected clock
signal group being within an eye open region of the serial data.